Identification and Recognition of Equipment Disposal Cleanup

2	Costs
3	Executive Summary
4	What is the Committee proposing?
5	The committee is proposing a methodology to provide clarification for recognizing cleanup costs
6	associated with the disposal of equipment assets. The methodology describes a process for
7	determining that if the equipment, through decommissioning or disposal, produces a hazardous
8	waste that is managed routinely, then the costs of cleanup are to be accounted for in accordance
9	with liability standards and are not subject to the recognition guidance provided in SFFAS 6. In
10	accordance with SFFAS 6 chapter 4, cleanup costs that occur when operations cease shall be
11	estimated when the associated PP&E is placed in service and a portion of estimated total cleanup
12	costs shall be recognized as expense during each period that general PP&E is in operation.
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14	Why is the Committee making this proposal?
15	The methodology proposed in this document provides additional guidance for defining which
16	hazardous wastes should be addressed as part of normal operations and thus accounted for in
17	accordance with the liability standards and which should have the estimated total cleanup costs
18	recognized as liability in each period that operation continues. The differentiation and treatment
19	should allow for consistent application of the provisions listed in the current standard.
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How would this proposal improve Federal financial reporting?

The proposed guidance in this document does not alter existing accounting standards for liability recognition. Instead, the proposed methodology provides steps that can be followed to help Federal entities consistently apply existing standards to help ensure consistent, accurate and meaningful application of the standard provisions. Increased standard application of existing accounting standards will help ensure that reporting entities do not misstate equipment disposal cleanup liabilities by recognizing cleanup costs when they are part of normal operations or by failing to report equipment disposal cleanup liabilities where required.

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How does this proposal contribute to meeting Federal financial reporting objectives?
In addition to helping Federal entities meet requirements for disclosure of equipment disposal
cleanup liabilities, the proposed methodology will help ensure that Federal entities provide
reasonable estimates of cleanup costs associated with the disposal of equipment assets, when
required. These costs as reported in the financial statements can be used by internal decision
makers and external financial statement users alike to assess the amount of cleanup costs
required to dispose of the equipment asset in an environmentally responsible manner.



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Description of Issue

- As federal agencies continue to develop their approach to implementing Statement of Federal
- 58 Financial Accounting Standards (SFFAS) 6 for recognition of equipment disposal cleanup cost it
- 59 has become apparent that a standard implementation strategy is needed to ensure consistent
- 60 reporting. Many federal agencies continue to struggle with interpretation of the accounting
- standard, while trying to find a cost effective implementation methodology that can identify and
- 62 recognize liability associated with equipment disposal.

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Scope

- This guidance affects all Federal entities that own equipment that contains materials that would
- be considered to be hazardous waste at the point of disposal. It provides definitions and
- additional clarification of SFFAS 6 for identifying and recognizing cleanup costs associated with
- 68 equipment disposal.

69 Relevant Accounting Standards

- 70 1. FASAB SFFAS 5, Accounting for Liabilities of the Federal Government
- 71 2. FASAB SFFAS 6, Accounting for Property, Plant, and Equipment
- 72 3. FASAB Technical Release 2, Determining Probable and Reasonably Estimable for
- 73 Environmental Liabilities in the Federal Government

74 Implementation Approach

- 75 In accordance with SFFAS 6, the cleanup costs are the costs of removing, containing, and
- disposing of (1) hazardous waste from property, or (2) material and/or property that consists of
- hazardous waste ¹ at permanent or temporary shutdown of associated PP&E. Cleanup costs, as
- 78 defined above, shall be estimated when the associated PP&E is placed in service. A portion of

SFFAS.6 Paragraph 86: Hazardous waste is a solid, liquid, or gaseous waste, or combination of these wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

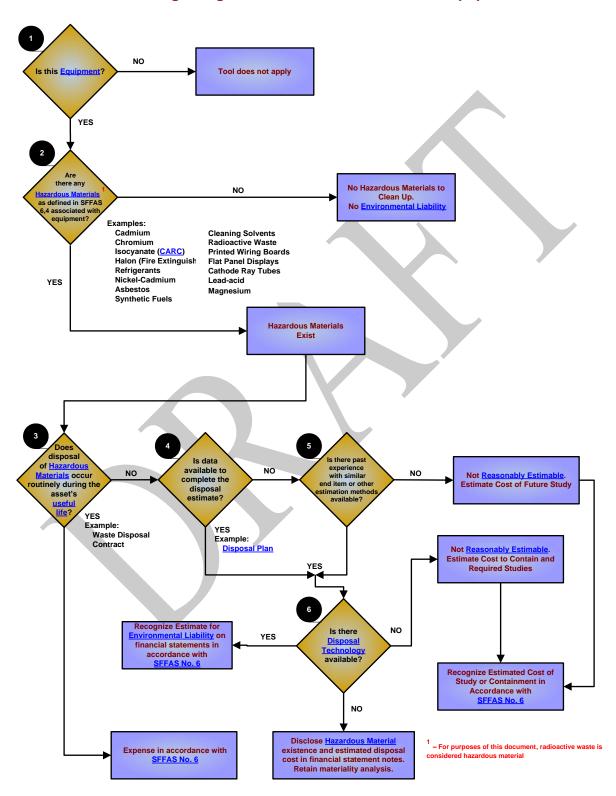
79	estimated total cleanup costs shall be recognized as expense during each period that general
80	PP&E is in operation ² . If such equipment disposal cleanup is an ongoing part of normal
81	operations, the costs are to be accounted for in accordance with liability standards and are not
82	subject to the recognition guidance provided in SFFAS 6, Chapter 4.3 Such costs should be
83	recognized in the period the cleanup occurs in accordance with guidance provided in SFFAS 5.4
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85	The costs of removing and disposing of hazardous waste (e.g., batteries, cleaning solvents, motor
86	oil) incurred as part of periodic, routine maintenance of equipment over its useful life, are
87	generally expensed as the costs are incurred. The cost of removing and disposing of the same
88	routine maintenance hazardous waste at the time of equipment disposal would likewise be
89	expensed when incurred. In many cases, hazardous wastes generated at decommissioning,
90	shutdown and/or disposal of equipment are the same as those routinely generated by day-to-day
91	operations, as determined by the regulatory requirements and disposal or other management
92	method for the waste.
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94	Thus, if asset decommissioning and disposal results in hazardous waste that is regulated and
95	managed the same as routine waste from operational processes, the costs of disposal are not
96	subject to the equipment disposal cleanup costs estimation and accrual over the equipment's
97	useful life or capacity as provided in SFFAS 6, Chapter 4.
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99	The following diagram facilitates identification of disposal liability associated with equipment
100	being decommissioned/shutdown/disposed:

² SFFAS 6 Paragraph 97: A portion of estimated total cleanup costs shall be recognized as expense during each period that general PP&E is in operation. This shall be accomplished in a systematic and rational manner based on use of the physical capacity of the associated PP&E (e.g., expected usable landfill area) whenever possible. If physical capacity is not applicable or estimable, the estimated useful life of the associated PP&E may serve as the basis for systematic and rational recognition of expense and accumulation of the liability.

³ SFFAS 6 Paragraph 93: Other cleanup costs, such as those resulting from accidents or where cleanup is an ongoing part of operations, are to be accounted for in accordance with liability standards and are not subject to the recognition guidance provided in this standard. This guidance does not apply to these other types of cleanup since the cleanup effort is not deferred until operation of associated PP&E ceases either permanently or temporarily.

⁴ SFFAS 5 Paragraph 29: Government-related events resulting in a liability should be recognized in the period the event occurs if the future outflow or other sacrifice of resources is probable and the liability can be measured, or as soon thereafter as it becomes probable and measurable.

Recognizing Environmental Liabilities for Equipment



Benefits and Costs

The expected benefit of this guidance is improved financial reporting of equipment disposal cleanup liabilities through standard implementation of existing standards across the federal government. This consistency and standardization will help reduce misinterpretation and confusion, which will ultimately reduce the cost of implementation imposed by the standard. The expected costs are the opportunity costs associated with determining how and when equipment disposal cleanup liabilities exist, and of developing and maintaining equipment disposal cleanup estimates.

Examples of Practices

Evaluate equipment disposal cleanup costs for an equipment item being placed in service.

- Unique hazardous waste stream
 A Federal entity acquires and places an equipment item in service. At that point the following considerations apply:
 - The acquisition information identifies materials that are used or created within the process and would cause the equipment item to be considered a hazardous waste if disposed with those materials intact.
 - Cost information is available for removing, containing, and disposing of the hazardous waste.
 - The hazardous waste in question is not removed and disposed in normal operations at the Federal facility, but will be disposed of as a separate waste stream.

Since the assessment of the newly acquired equipment has determined the presence of hazardous waste that is not routinely removed and disposed during equipment operation, the probability requirement of equipment disposal cleanup liability recognition has been satisfied. In addition, based on the flow diagram and the information above, and in accordance with SFFAS 6, the costs of removal, containment and disposal of the hazardous waste associated with disposal of the equipment item can be reasonably estimated. The Federal entity must recognize a liability for these estimated costs.

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136	2. Routine hazardous waste stream (see Appendix A for specific example)
137	A Federal entity acquires and places an equipment item in service at a facility. At that
138	point the following considerations apply:
139	• The acquisition information identifies materials that are used or created within
140	the process and would cause the equipment item to be considered a hazardous
141	waste if disposed with the identified material intact.
142	 Cost information is available for removing, containing, and disposing of the
143	hazardous waste.
144	• The hazardous waste in question is routinely removed and disposed in normal
145	operations at a Federal facility, and will be disposed with other wastes.
146	Based on the flow diagram and the information above, the costs of removal,
147	containment and disposal of the routine wastes associated with disposal of this
148	equipment item are to be recognized, in accordance with the liability standards, in the
149	period the removal, containment and disposal of routine wastes occurs. These costs
150	are not subject to the recognition guidance provided in SFFAS 6 to be estimated at
151	the time the equipment item is placed in service and recognized during each period
152	the asset is in operation.
153	Basis for Conclusion

Basis for Conclusion

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Hazardous materials are used in many processes and when managed properly in accordance with appropriate environmental regulations, pose minimal potential risk to human health and the environment. At the end of the useful life of a hazardous material, it usually becomes a hazardous waste. From an environmental regulatory perspective, most hazardous wastes generated at decommissioning, shutdown and disposal of equipment are the same as hazardous wastes generated routinely from normal operations. The costs associated with disposal of these routine items should be classified as an operating expense and recognized in accordance with the liability standards and are not subject to the cleanup cost recognition guidance during each period the general PP&E is in operation. This is in compliance with existing standard language that states: "Other cleanup costs, such as those resulting from accidents or where cleanup is an

ongoing part of operations, are to be accounted for in accordance with liability standards and are not subject to the recognition guidance provided in this standard."⁵

Suggestion to the Board

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The committee suggests that the Board adopt this implementation guidance and methodology to provide additional clarification to SFFAS 6, Chapter 4, Paragraph 93.



⁵ SFFAS No. 6, Chapter 4, Paragraph 93

Decommissioning of Used Perchloroethylene Dry Cleaning Equipment

A dry cleaning operation uses the hazardous material perchloroethylene (perc). Perc is a colorless liquid with mild odor used primarily as a dry cleaning solvent. Perc is highly volatile; 80-85% of the chemical used annually is released into the atmosphere with only 1% to water. The greatest health risk presented by perc is inhalation by industry workers. Studies of industry workers indicate a "probable" linkage between prolonged exposure and certain cancers.





Drycleaners typically recycle used solvent on-site which creates several hazardous waste streams. The quantities of waste have been greatly reduced, nevertheless, hazardous waste will continue to be removed and disposed as long as the hazardous solvent is used in the operation. In addition, leaks and spills represent a significant potential environmental hazard.

Table 1 presents the hazardous waste streams removed and disposed from dry cleaning operations, and lists the regulatory categorization (i.e., EPA Hazardous Waste code), and typical method for managing the waste. The third column indicates if the waste is created and disposed during the operation of the equipment, or decommissioning, or both.

Table 1. Hazardous Waste from Dry Cleaning Operations and Decommissioning			
Waste Stream	EPA HW Code	Operation/ Decomm/ Both	Management Method
Spent Solvent	F002 ¹ , D039 ²	Both	Reuse/recycle on-site or ship to TSDF ³
Used Filter Cartridges	F002, D039	Both	Ship to TSDF
Distillation Residues	F002, D039	Both	Ship to TSDF
Cooked Powder Residues	F002, D039	Both	Ship to TSDF
Unused Perc	D039, U210 (if disposed)	Decomm.	Reuse/recycle on-site or return to distributor
Wastewater from equipment cleaning	F002, D039	Decomm.	Ship to TSDF
Scrap Metal	Non-hazardous if cleaned	Decomm.	Recycle

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In this example, the waste generated at equipment decommissioning is a routine waste stream, because it

195 falls under the same regulatory requirements (F002, D039) and waste management method (ship to

196 TSDF) as the waste generated during operation of the equipment, or it is recycled and not disposed as a

197 hazardous waste.

References:

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¹F002: Represents waste containing the class of solvent that includes perchloroethylene

²D039: Represents waste containing the specific solvent, perchloroethylene 200 201

³TSDF: Facility permitted for Treatment, Storage, and Disposal of RCRA hazardous waste.

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- 1. RCRA in Focus: Dry Cleaning, EPA530-K-99-005, June, 1999
- 2. Proper Disposal of Used Perc Dry cleaning Equipment, Environmental Facilities Corp, April, 205 206 2002
- 3. A Pollution Prevention Guide for the Dry Cleaning Industry, Delaware Department of Natural 207 208 Resources and Environmental Control, www.dnrec.state.de.us/deldrycl.htm

210	Appendix B: Glossary
211	• Disposal Plans: Disposal is the end of life tasks and/or actions for residual materials resulting
212	from the demilitarization and disposition processes.
213	■ Disposal Technology: A method that applies technical knowledge or tools that render
214	harmful or hazardous substances harmless at disposal.
215	■ Environmental Liability: An environmental liability is a probable, measurable and
216	reasonably estimable future outflow or expenditure of resources that exist as of the financial
217	reporting date for environmental cleanup costs resulting from past transactions or events.
218	■ Equipment:
219	o General Equipment: Any item that is functionally complete for its intended
220	purpose and that:
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237	 Has an expected useful life of two or more years; Is not intended for sale in the ordinary course of business; Is intended to be used or is available for use by the entity; Does not ordinarily lose its identity or become a component part of another article; and Is not available for the use of the reporting entity in the performance of battlefield missions or to support related training. Military Equipment: Any item that is functionally complete for its intended purpose and that: Has an expected useful life of two or more years; Is not intended for sale in the ordinary course of business; Does not ordinarily lose its identity or become a component part of another article; and Is available for the use of the reporting entity in the performance of battlefield missions or to support related training.
238	■ Probable: That which can reasonably be expected to occur or is believed to be more likely
239	than not on the basis of available evidence or logic. Definition from Statement of Federal
240	Financial Accounting Standards (SFFAS) 5, p9ar. 33:
241	http://www.fasab.gov/pdffiles/codification_report2007.pdf.

- Radioactive Wastes: Material containing the unusable radioactive byproducts of the
 scientific, military and industrial applications of nuclear energy (source: Columbia
 encyclopedia).
- **Reasonably Estimable:** The ability to reliably quantify in monetary terms the outflow of resources that will be required.⁶
- **Useful Life:** The normal operating life of an end item in terms of utility to the owner.



⁶AAPC, 'Determining Probable And Reasonably Estimable For Environmental Liabilities In The Federal Government Federal Financial Accounting And Auditing,' Technical Release Number 2

250		Appendix C: List of Abbreviations
251		
252	AAPC	Accounting and Auditing Policy Committee
253	CARC	Chemical Agent Resistant Coating
254	FASAB	Federal Accounting Standards Advisory Board
255	FASB	Financial Accounting Standards Board
256	GPP&E	General Property, Plant, and Equipment
257	PERC	Perchloroethylene
258	PP&E	Property, Plant, and Equipment
259	SFFAS	Statement of Federal Financial Accounting Standards
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